



**BEEKEEPING Level-I**

# **Learning Guide-04**

**Unit of Competence:** Support

Beekeeping Work

**Module Title:** Supporting Beekeeping

Work

**LG Code:** AGR BKGI M12LO4-LG-12

**TTLM Code:** AGR BKGI M12sTTLM

0919v1

**LO 4:** Participate in maintaining health and safety work place



### Instruction Sheet-3

### Learning Guide #12

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Raising OHS issue and designs according to with enterprise procedures
- Contributing participative arrangements in the work place
- Making Suggest to assess the development
- Assessing manual handling risk
- Assessing information on OHS for specific work operations.

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- Raises OHS issue and designs according to with enterprise procedures
- Contributes participative arrangements in the work place
- Makes Suggest to assess the development
- Asses manual handling risk
- Asses information on OHS for specific work operations

#### **Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 23.
3. Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” in page 11.
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.



8. Read the information written in the “Information Sheet 2”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
9. Accomplish the “Self-check 2” in page 15.
10. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the “Information Sheets 3 . Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
12. Accomplish the “Self-check 3” in page 17.
13. Read the information written in the “Information Sheets 4. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
14. Accomplish the “Self-check 3” in page 17
15. Read the information written in the “Information Sheets 5 Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
16. Accomplish the “Self-check 4” in page 22
17. Read the information written in the “Information Sheets 6 Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding then
18. Accomplish the “Self-check 5” in page 22
19. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 5).
20. If you earned a satisfactory evaluation proceed to “self 5” in page 25. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
21. Read the “Operation Sheet 1” and try to understand the procedures discussed. in page 29
22. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
23. Do the “LAP test” in page 29 (if you are ready). Request your teacher to evaluate your performance and outputs. Your teacher will give you feedback and the evaluation will be



either satisfactory or unsatisfactory. If unsatisfactory, your teacher shall advise you on additional work.

<b>Information Sheet-1</b>	monitor and report on all aspects of workplace safety
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## Introduction

This module covers the process of implementing and monitoring the enterprise OHS program. It requires the ability to provide information to the work group about OHS, facilitate the participation of workers, implement and monitor enterprise procedures for identifying hazards and assessing and controlling risks, dealing with emergencies and hazardous events, and maintain occupational health and safety records. Implementing and monitoring the enterprise OHS program requires knowledge of hazards in the workplace, relevant OHS legislation and Codes of Practice, risk control measures, hierarchy of risk control, and relevant enterprise management systems and procedures.

## Definition of Terminologies

**Terminology:** refers to those terms that are commonly used in livestock operation and the discussion of this module. These include: -

**Accident:** -is the term indicating a condition of something unpleasant, undesirable, or damaging, that happens unexpectedly during work operation in the workplace due to several factors. It can be physical, mechanical, chemical, biological, electrical, emissions, etc.

**Hazard** is anything (condition, situation, practice or behavior) that has the potential to cause harm including injury, disease, death, environmental or property and equipment

**Safety:** refers to the condition of workers and animals being freedom from danger, harm, or risk



**OHS Procedures** refers to guidelines and/ or technical reference documents with general used to avoid risk techniques

**Occupational Health and Safety (OHS):** Any occurrence which results in personal injury, disease or death, or property damage

**Risk:** Risk is the significance of the hazard in terms of likelihood and severity of any possible injury.

**Hazardous Substances** Any substance that has the potential to harm the health of persons in the workplace and includes chemicals scheduled under the Poisons Act, chemicals classified under the Dangerous Goods Act (1975) or Hazardous Wastes.

**OHS policies:** An OHS policy is a broad statement that says who is responsible for managing and monitoring OHS and lists any particular objectives for OHS

**Workplace** is any land, premises, location or a thing at, up on in or near which a worker works

**Hazard identification** a stage in the risk assessment process where potential hazards are identified and recorded

### **1.1. Observe safe practices during work operation**

#### **Personal protective clothing and equipments**

This is always the last control measure to be considered. There is still a potential risk to the individual because the effectiveness relies on wearing and using PPE properly. Although PPE is effective for the individual using it, PPE provides no protection for other workers or bystanders. If you have controlled or eliminated the risk by some other method you may not need to wear PPE. PPE includes

- face shields
- respirators
- dust masks
- earmuffs or gloves
- Jacket or suit
- Rubber boots



- Hive tool
- Smoker
- Bee brush
- Personal protective equipment is often used in conjunction with other risk control measures.

Personal protective equipment (PPE) means all equipment (including clothing giving protection against the weather) which is worn or held to protect against risks to health or safety. PPE includes the following, when worn for health and safety protection:-

- (a) Protective **clothing** (e.g., aprons, gloves, footwear, helmets, high visibility waistcoats)
- (b) Protective **equipment** (e.g., eye protectors, respirators, safety harnesses).

**1. Provision of PPE:** Employers must ensure that suitable PPE is provided to employees exposed to a risk to their health or safety except where the risk has been adequately controlled by other equally, or more effective means. 'Suitability' is by reference to:

- Being appropriate to the risks and workplace conditions.
- the ergonomics and state of health of the person
- being capable of fitting the wearer correctly
- Being effective in preventing or adequately controlling the risk without increasing an overall risk.
- Complying with any other provision implementing any PPE EC Directive.

PPE should be seen as a last resort in the hierarchy of control measures; it should be made readily available (in most cases on a personal basis); no charge can be levied; ergonomic factors should be considered i.e., match the PPE to the person; quality must be ensured i.e., to be certified ('CE' marked) as meeting basic safety requirements.

**2. Compatibility of PPE:** This is required where more than one piece of PPE is worn.

**3. Assessment** is needed to ensure the suitability of the PPE to be provided. This should include assessment of the risks, the PPE risk protection characteristics and a comparison of PPE available.

**4. Maintenance and Replacement:** PPE should be maintained (including replaced or cleaned as appropriate) in an efficient state, in efficient working order and in good repair. Responsibilities, procedures (including frequencies) should be established and appropriate records kept.



5. **Accommodation:** Suitable accommodation must be provided for the safe storage of PPE. Contaminated or defective PPE should also be segregated.

6. **Information, instruction and training** needs to be provided in a systematic way; it should cover users, managers/supervisors and repair/maintenance/test personnel. Records should be kept. Training to be both theoretical and practical, induction and refresher as necessary.

7. **Use of PPE:** There are duties on employers, self-employed persons and employees to ensure the proper use of PPE.

8. **Reporting of loss/defect** - to the employer.

## 1.2. Assessing and identifying hazards and risks at workplace

A hazard is defined as an agent, element or event that possesses potential harm, an adverse event or adverse outcome. Or, a **hazard** is any situation, condition or thing that may be dangerous to the safety or health of workers.

A hazard is a source of potential harm or a situation with a potential to cause loss to:

- ✓ People - Injury
- ✓ Allergy of bee sting
- ✓ Equipment - Breakage
- ✓ Fire burning

It is the process used to identify all the possible situations in the workplace where people may be exposed to injury, illness or disease. It is a categorization step identifying biological agents and genotypic and phenotypic hazards, as potential hazards or not, which could potentially be introduced with a commodity or activity and for which pathways exist for exposure of the agents to susceptible animals

### Why it is important?

The first step in preventing incidents, injuries or illness in the workplace is identification of all the hazards within the workplace that could cause injury or illness. As an employer, you have your business objectives as well as moral and legal obligations to provide and maintain a safe and healthy workplace.

To effectively manage the business (including health and safety in the workplace) and discharge both moral and legal obligations, it is imperative for:



- ✓ any potentially hazardous situations (which may cause injury, illness or disease) in the workplace to be
- ✓ identified on an ongoing basis before they occur;
- ✓ the likelihood of each of the hazardous situations occurring to be assessed;
- ✓ if there is any likelihood of occurrence, appropriate measures to prevent their occurrence to be identified and effectively implemented; and
- ✓ the measures to be continually reviewed to ensure their effectiveness.

### 1.3. Hazards in beekeeping farm

Beekeeping farms (workplaces) can be dangerous. There are many hazards that have the potential to kill, injure or cause ill health or allergy. Exposure to the hazard is depending on the type of activities carried out in different farms. different activity that lad to hazard in beekeeping farm are

- ❖ Harvesting of honey
- ❖ Colony transferring
- ❖ Colony splitting
- ❖ Internal hive inspecting
- ❖ Other work near to the hive

#### I. Behavior and handling - bees.

##### A. Behavior

- **Worker bees are aggressive**
- **Bee not like color full cloth**
- **Bee sting animals poultry and humans**

### 1.4. Recognizing and reporting hazards in workplace

#### Identifying Occupational Health and Safety (OHS)

##### The sting

The worker sting is a highly modified for its defensive purpose.

The sting is found in the sting chamber, invisible, last segment. The entire pack of the sting is divided into two regions.

##### Factors affecting the sting of a worker honey bee

###### 1. Genetic make up

Some are highly aggressive Eg. Tropical bees



Some bees are highly gentle/docile/. Eg. European bees

2. Condition of time

When there is scarcity of forage or less nectar flow

During this time the bees use high venom

3. When the colony becomes queen less during this time they get exited

4. Insecticide poison, mostly organophosphate

### **Reactions of stings**

In human reactions to stings take place on three levels

1. Localized reaction

2. Systematic reaction

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### 3. Anaphylactic

#### 1. Localized reaction

In the first kind of reaction the initial localized swelling is followed by more extensive swelling a few hours later and the affected area may be red, itchy and tender for 2-3days.

#### 2. Systematic reaction

A systematic reaction generally occurs within a few minutes of stinging and it may involve a whole body rash wheezing, nausea, vomiting, abdominal pain and fainting.

#### 3. Anaphylactic reaction

In this reaction symptoms can occur within a seconds, and they include difficulty in Breathing

Confusion

Vomiting

Falling blood pressure that can load to loss of consciousness and death from circulatory and respiratory collapse.

Generally, one can develop some resistance to beestings the more one is stung although the reaction to stings can become shuddery acute for no apparent reason. Those who are extremely sensitive may die from a single sting.

#### First aid for sting

The sting should be removed with a sharp needle or by scraping it away from the side with a knife or fingernail. An ice-cold compress applied after sting has been removed will relieve the pain

Anti-histamine;

In the form of (1) Ointment (2) Injection

Adrenaline injection

In addition to these;

Work with bees in the late or in the evening

Avoid working bees in rainy, windy time

Smoke under the frame and wait two minutes before opening

While moving in the apiary, move slowly and quietly

Avoid crashing

Wash your protecting materials (glove, overall, etc) after three operation times.

When bee stings develop into large swelling and rash, medical advice should be sought straight away.

Anyone who is acutely allergic to bee sting and knows that unconsciousness may occur a few minutes after a sting, must immediately inform someone, so that they may be transported as soon as possible to a doctor or a hospital for emergency injection treatment.

Finally, any beekeeper suffering abnormal aping side effects from bee stings should give up keeping bees.

A procedure for reporting and addressing occupational health and safety hazards and issues needs to be established. This procedure should also include a process for resolving issues or disputes. If an employee identifies a hazard or occupational health and safety issue they



should report it to their direct supervisor or manager and health and safety representative, and established procedures should be followed

Workplace hazards can be divided into six groups:

**Physical hazards** such as noise, electricity, heat and cold;

**Chemical hazards** such as toxic gases, noxious fumes and corrosive liquids;

**Ergonomic hazards** such as the height of a workbench, the shape of a vehicle seat and the length of a control lever;

**Radiation hazards**, for example, from x-ray machines, high powered lasers, radioactive materials;

**Psychological hazards** such as stress from using equipment without proper training or instructions, overwork, or being coerced into using faulty equipment which carries a risk of injury; and

**Biological hazard** such as syringes containing potentially infected blood, specimen containers carrying potentially infected materials and bacteria and viruses from air conditioning systems. Therefore these all hazards have to be reported **as soon as they occur based on the report format**

Self-Check -1	Written Test
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. List hazard control PPE. (3 points)

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2. Write bee behavior related to hazard (3 points)

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**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

You can ask your teacher for the copy of the correct answers.

**Answer Sheet**

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**

<b>Information Sheet-2</b>	Raise OHS issue and designs according to with enterprise
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1.1 OHS legislation and Codes of Practice

To ensure that the risk management process has been conducted appropriately within all stages, national and state OHS authorities (eg .Work Cover) have produced guidance material to assist workplaces to understand and apply their OHS legal responsibilities.

These guidelines are called:

- standards



- codes of practice
- Guidance notes.

State and territory-based codes of practice and guidelines can be located through the state and territory OHS authorities.

These documents are helpful in providing information on industry-specific and general risk management issues within the workplace. It is also important to note that some standards and codes of practice are required to be used by law. If this is the case, reference will be made to the standard or code of practice within the state/territory's OHS legislation. Several standards and/or codes of practice are usually required when managing OHS risks within an event environment

## **1.2 OHS policies, procedures and programs**

### Importance of OHS Policies

Occupational Health and Safety (OHS) is important to create safe work place and to ensure that the work place is a safe for everyone, including visitors to the Property. Having an OH&S policy in work place help employers to meet his responsibility. It also helps them to effectively communicate their commitment to health and safety of workers. Developing, implementing and maintaining an OH&S policy also makes good economic sense. Accidents are costly; perhaps it may even more expensive than expected. Accidents related to cost can add-up quickly and may include:

- possible overtime,
- production loss,
- time spent on completing paper work,
- pain and suffering of an injured worker,
- loss of business or goodwill or negative publicity,
- possible legal costs,
- Effect on the community.

By developing and implementing an OH&S policy, these costs could be reduced.

### **OHS Procedures**

OHS procedure can be described as safe work procedures. These need to cover what needs to be done when carrying out tasks that may have risks or when working in a hazardous



environment. For example, when cleaning an extracting room floor, an OHS procedure would explain:

- The purpose of the task and associated possible hazards
- who is to carry out the task and any special training or other requirements that they must meet
- The equipment needed to carry out the task and how it should be used
- what chemicals can be used and any safety precautions that need to be followed for those chemicals
- how to safely deal with excess water, for example by using a squeegee or mop or 'sweep' the excess water towards the drainage point in the floor
- requirement to place hazard warning signs to alert others to the hazard of excess water
- Emergency procedures to be followed (e.g. washing out chemicals on skin or eyes).

### **1.3 Assisting work place hazard identification and risk control**

The hazard identification process is designed to identify all the possible situations where people may possibly be exposed to injury, illness and disease arising from all sources including the above.

Prior to the introduction of any plant, substances, processes or work practices in the workplace, it is essential for the hazard identification process to be carried out to identify whether there is any potential for injury, illness or disease associated with such introduction. This will assist you to take the necessary actions for what may otherwise be extremely costly further down the track if no action is taken at this early stage.

Carrying out hazard identification for all existing plant, substances, processes and work practices in your workplace may require some effort. If you have a large workplace, it is a good idea to split it into several discrete areas for the hazard identification process, and to tackle one area at a time. Priority should be given to areas with hazardous plant, substances, processes or environment.

In order to minimize the time involved, it is better to perform hazard identification on all sources of hazards in a particular area of the workplace instead of doing each hazard source (e.g. plant, hazardous substances etc) at a time.



The relevant health and safety representatives need to be consulted during the hazard identification process. Employees working in the area have day to day experience of any hazards and should be involved in the hazard identification process. Advice should also be sought from people who are associated with the activities and processes in the area because they may provide valuable input.

Hazards in the workplace can change from day to day. In order to effectively manage workplace health and safety you need to introduce proper systems and procedures to ensure hazard identification is carried out on a regular basis. The OHS legislation requires you to repeat the hazard identification process:

- ✓ before any alteration to plant or any change in the way plant is used or a system of work associated with plant, including a change in the location of plant;
- ✓ before any alteration is made to objects used in the workplace or to systems of work which include a task involving manual handling, including a change in the place where a task is carried out;
- ✓ before plant is used for any other purpose than for which it was designed;
- ✓ before an object is used for another purpose than for which it was designed if that other purpose may result in the person carrying out hazardous manual handling;
- ✓ if new or additional information about hazards becomes available to you; and
- ✓ if an occurrence of a musculoskeletal disorder in your workplace is reported by or on behalf

<b>Self-Check -2</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What does OHS explain (3points) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
2. What is the importance of OHS (3points) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**



## Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Short Answer Questions

<b>Information Sheet-3</b>	Contribute participative arrangements in the work place
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#### 3.1. Responsibilities and expectation of both employees and employers

After one is hired it is important to understand that employers have certain expectation that must be met if one is to be successful in his career. Desirable and undesirable work habit can have a strong influence on career success. Good citizen ship skills are important in one's life and employees have a right to expect certain things from their employers. The workers need to understand that employer expectation and good work habits are linked. For the success of job, the worker should develop and use good work habits that will help to meet employer expectations.

*Specific expectation* will vary from job to job. Some employers have employee hand book that spells out acceptable and unacceptable behavior. If such a hand book is available, study it carefully and takes it seriously; failure to do so often leads to job termination. If there is no policy hand book available, ask your supervisor for an explanation of company policies and a summary of what a company expects from its employees.

#### 3.2. General Employee responsibilities include:

- protecting his/her own and other workers' health and safety;
- knowing and following legislation and safe work practices at all times; properly using all safety clothing/equipment/devices provided; and
  - reporting unsafe conditions in the workplace,
  - Traits of honesty and dependability; Work with others,
  - Safety on the job,
  - Good communication skills,
  - Appropriate behavior,
  - Health and grooming, and



- Good citizenship

### **3.3. Employer responsibilities:**

Organizations will be required to operate according to legislative requirements using best practices and following (organization name) policies and procedures regarding health and safety.

- providing and maintaining safe equipment, systems and tools;
- providing and maintaining the information, instruction; training, supervision and facilities that are Necessary to ensure the health, safety and welfare of workers;
- ensuring workers use necessary protective clothing and devices;
- ensuring work procedures comply with legislation and safe work practices at all times;
- ensuring all workers are aware of workplace hazards and follow safe work practices and procedures;
- ensuring workplace inspections are completed on a regular basis and follow-up actions taken as necessary;
- Reporting serious injuries

### **3.4 Measure have to be taken for un safe work .**

An employee can refuse work if he/she believes that the situation is unsafe to either himself/herself or his/her co-workers. When a worker believes that a work refusal should be initiated, then the employee must report to his/her supervisor that he/she is refusing to work and state why he/she believes the situation is unsafe for the employee, supervisor, and a JHSC member. Then employee representative will investigate the employee returns to work if the problem is resolved with mutual agreement if the problem is not resolved and a government health and safety inspector is called inspector have to investigate and give decision in writing.

<b>Self-Check -3</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. list employer responsibility (3 points)\_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

You can ask you teacher for the copy of the correct answers.

### Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Short Answer Questions

<b>Information Sheet-4</b>	Make Suggest to assess the development
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#### 4.1 Undertaking safety training

Accordingly the workers need to know their environment and should take trainings on fields of their specialization or in work place hazards in this case for livestock husbandry practices i

##### 1. Manual handling

It refers to any activity that requires a person to use force to push, pull, roll, hold, or carry an object or hive and hive products, and includes repetitive tasks, such as using hand tools, operating machinery and even mil.

##### 2. Machine Guarding



People working in or visiting the bees can be exposed to plant and machinery hazards

The unguarded moving parts of plant and machinery could result in a person being entangled, struck, crushed, punctured, stabbed or suffer friction burns

### **3. Confined spaces in beekeeping**

Areas in the transferring area, such

Confined spaces are usually distant must bees hive full fill or containers that are large enough for people to avoid bee disturbance

### **4. Slips and trips.**

Slips, trips and falls are the most common cause of injuries in all workplaces and make up the greatest number of Work Cover claims. Slips and trips can cause serious injuries, including sprains and strains

### **5. Chemicals(fertilizer and weed sides)**

Chemical use can be dangerous at any time, but particularly when you are exposed to a chemical concentrate. Aside from direct ingestion, chemicals can be absorbed into the body through:

- exposure to skin;
- breathing in fumes when applying, cleaning, decanting or mixing; and
- Ingesting the substance by accident or through poor hygiene.

Flower water are poised.

### **4.2. Assessing and identifying hazards associated with handling of hazardous substances**

For all hazards a hazard management process must be undertaken. Establishing the parameters of the process including the criteria by which hazards will be assessed. Staff and contractors are to follow the hazard management model to ensure all hazards are identified, assessed, controlled and evaluated for effectiveness. The level of risk is to be determined through the risk assessment process and recommended control measures implemented.



Hazards are required to be identified, assessed and controlled:

- when planning work processes
- prior to purchase, hire, lease, commissioning or erection of plant or substances
- whenever changes are made to the workplace, system or method of work, plant or substances
- whenever new information becomes available regarding work processes, plant or substances.

Prior to any new process being undertaken or where a new hazard has been identified a risk assessment **must** be completed to ensure that all risks are adequately controlled.

When all risks are adequately controlled or pose minimal risk no further action is required. Should further control measures be required a full risk assessment must be completed. No process should be undertaken unless adequate control measures are in place.

Hazards in a workplace can arise from a number of sources including:

- poor workplace design;
- hazardous tasks being performed in the workplace;
- poorly designed plant being introduced into the workplace;
- incorrect installation, commissioning, use, inspection, maintenance, service, repair or alteration of plant in the workplace; and
- people being exposed to hazardous substances, processes or environment.

The hazard identification process is designed to identify all the possible situations where people may possibly be exposed to injury, illness and disease arising from all sources including the above.

Prior to the introduction of any plant, substances, processes or work practices in the workplace, it is essential for the hazard identification process to be carried out to identify whether there is any potential for injury, illness or disease associated with such introduction. This will assist you to take the necessary actions for what may otherwise be extremely costly further down the track if no action is taken at this early stage.



Carrying out hazard identification for all existing plant, substances, processes and work practices in your workplace may require some effort. If you have a large workplace, it is a good idea to split it into several discrete areas for the hazard identification process, and to tackle one area at a time. Priority should be given to areas with hazardous plant, substances, processes or environment.

In order to minimize the time involved, it is better to perform hazard identification on all sources of hazards in a particular area of the workplace instead of doing each hazard source (eg plant, hazardous substances etc) at a time.

The relevant health and safety representatives need to be consulted during the hazard identification process.

Employees working in the area have day to day experience of any hazards and should be involved in the hazard identification process. Advice should also be sought from people who are associated with the activities and processes in the area because they may provide valuable input.

People undertaking hazard identification should have the necessary training to look for:

**Mechanical hazards including:**

- "drawing in" points
- shearing points
- impact and crushing areas
- cutting areas
- entanglement areas
- stabbing points
- abrasion areas
- flying particles
- any protrusions which could cause injury

**Non-mechanical hazards including:**

- ergonomic hazards including manual handling
- electrical shocks and burns
- chemical burns, toxicity, flammability
- noise
- vibration
- radiation
- mist, dust, fumes
- suffocation
- engulfment
- biological hazards, viral
- slipping, tripping and falling hazards
- falling objects



- high pressure fluid
- high temperature objects
- working in very hot or cold conditions

Checklists should be developed to assist people who are involved in the hazard identification process in the systematic identification of hazards.

Hazards in the workplace can change from day to day. In order to effectively manage workplace health and safety you need to introduce proper systems and procedures to ensure hazard identification is carried out on a regular basis. The OHS legislation requires you to repeat the hazard identification process:

- before any alteration to plant or any change in the way plant is used or a system of work associated with plant, including a change in the location of plant;
- before any alteration is made to objects used in the workplace or to systems of work which include a task involving manual handling, including a change in the place where a task is carried out;
- before plant is used for any other purpose than for which it was designed;
- an object is used for another purpose than for which it was designed if that other purpose may result in the person carrying out hazardous manual handling;
- if new or additional information about hazards becomes available to you; and
- if an occurrence of a musculoskeletal disorder in your workplace is reported by or on behalf of an employee.

<b>Self-Check -4</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. list at least 5 mechanized and 5 none mechanized hazards (10 points)

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**Note: Satisfactory rating - 5 points**

**Unsatisfactory - below 5 points**

You can ask you teacher for the copy of the correct answers.

### Answer Sheet

Score = \_\_\_\_\_

Rating: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Short Answer Questions

<b>Information Sheet-5</b>	. Asses manual handling risk
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### 5.1 Identifying and participating in manual handling hazards and risk

To begin the risk management process we firstly need to have the ability to identify tasks that have the potential to cause manual handling injuries. Under the OHS Regulation, hazard identification must be conducted by employers:

- before using any premises as a place of work
- before and during installation, erection, or alteration of plant
- before changes to work practices and systems of work are introduced
- whilst work is being carried out
- when new or additional health and safety information becomes available.

Management's responsibility is to ensure that hazard identification takes place at all stages of product service or delivery, from design to manufacture, supply and product use. Supervisors should support this process by involving all employees in the hazard identification process to ensure success.



Manual handling can include any of the following:

- application of force
- repetitive or sustained application of force
- repetitive or sustained awkward posture
- repetitive or sustained movement
- exposure to sustained vibration
- handling live people or animals
- Handling loads that are unstable, unbalanced or difficult to hold.

## **5.2. Fire fighting and first aid equipments**

Fire is one of the most serious hazards on a beekeeping farm. It is usually caused by carelessness. Most fires start from electrical equipments, heaters, or careless smoking. Other causes of fires are lighting, arson, and spontaneous combustion. High level of moisture and ammonia in livestock confinement is also another cause of fires.

First aid kits should be present at all work areas with proper medical supplies.

Items in first aid kits include;

\* Various sizes of sterile bandages

\* Roller bandages

\* Triangular bandages

\* Cotton balls

\* a list of names and phone numbers of nearest doctor, ambulance, paramedic services, and poison control centers etc.



<b>Self-Check -5</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1, What are manual handling risks? (3 points)

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2, hazard identification must be conducted by employers:

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**Note: Satisfactory rating - 3 points**

**Unsatisfactory - below 3 points**

You can ask your teacher for the copy of the correct answers.

**Answer Sheet**

Score = _____
Rating: _____

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**



<b>Information Sheet-6</b>	Asses' information on OHS for specific work operations.
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## 6.1 Ways to get and keep people involved in maintaining health and safety

**Information of risk in work place can be collect either of** qualitative quantitative or both of them from:

- Document
- Observation
- experience

A safe workplace requires the active involvement of all people who work in the business or organization. The important thing is that all employees must have a way to have their OHS concerns brought to the attention of 'management' and that employees are consulted about how risks will be managed in the workplace.

Better outcomes are achieved when there is a wide range of ideas about health and safety issues on the farm and how to fix them. Hence, there is usually greater commitment to decisions because everyone is involved in reaching them.

### Ways to get and keep people involved

- Work directly with the people who do the jobs in each part of the farm to identify hazards, assess risks and come up with solutions.
- Set regular times to discuss health and safety, such as at weekly job planning meetings, and ensure time is allocated specifically to health and safety matters. Some businesses have occupational, health and safety committees that keep minutes and actions from their meetings.
- Provide a good role model and insist that the farm safety protocols you have established are followed.
- A record of consultation is good practice and may help demonstrate compliance.

## 6.2. Incorporating OHS in to a work place



Simply having a written OH&S policy is not enough to meet obligations regarding workplace health and safety. To ensure the OH&S policy is effective, there should be a plan for putting the words into meaningful actions. Some ways of doing this include:

- ❖ providing health and safety orientation for new staff;
- ❖ providing health and safety orientation for current staff who start new job tasks, move to new locations, or use new tools, equipment or work processes;
- ❖ providing health and safety training on an on-going basis; including health and safety responsibilities and performance objectives when hiring and evaluating staff;
- ❖ recognizing, evaluating and controlling hazards;
- ❖ conducting regularly scheduled workplace inspections;
- ❖ establishing procedures for reporting and investigating accidents/incidents;
- ❖ documenting and recording health and safety related activities; and
- ❖ Monitoring management and staff to ensure they are carrying out their health and safety responsibilities.

### **Ensuring success**

Part of a successful OH&S policy is ensuring that all workers are aware of its contents. This can be accomplished through:

- ✓ OH&S training;
- ✓ distributing a copy to all workers;
- ✓ including it in policy and procedure manuals;
- ✓ postings on notice board(s);
- ✓ safety talks and meetings; and

A positive example set by management (i.e. how they respond to safety issues, how they carry out their roles and responsibilities, how they enforce the OH&S policy). Maintaining an OH&S policy is as important as developing and implementing it and is necessary for its effectiveness.

Health and safety is not something to be entered into and then forgotten. It is an ongoing process that requires continuous attention of employers, workers, and the WH&S representative/OH&S committee members. These individuals must keep up-to-date with changes in legislation and other areas that affect workplace health and safety. An OH&S policy should be reviewed yearly and revised as required to ensure it continues to effectively reflect the specific needs of the workplace.



<b>Self-Check -6</b>	<b>Written Test</b>
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**Directions:** Answer all the questions listed below. Use the Answer sheet provided in the next page:

1, insuring success without risk is accomplished by (4 points)

- A \_\_\_\_\_
- B \_\_\_\_\_
- C \_\_\_\_\_
- D \_\_\_\_\_

2, risk information is collected by \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Note: Satisfactory rating - 2 points**

**Unsatisfactory - below 2 points**

You can ask you teacher for the copy of the correct answers.

**Answer Sheet**

Score = _____
Rating: _____

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Short Answer Questions**



<b>Operational sheet-1</b>	<i>practices during safe work operation procurers</i>
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Stape1, collect Personal protective clothing and equipments

Stape2, check Compatibility of PPE: This is required where more than one piece of PPE is worn work shop.

Astape3, assessing defects on PPE

Stape4, Maintenance and Replacement:

stape5. Accommodation.

stape6. implement Information, instruction and training

stape7. Ensure the proper use of PPE.

stape8. Finally report loss/defect

<b>LAP Test</b>	<b>Practical Demonstration</b>
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Name: \_\_\_\_\_ Date: \_\_\_\_\_

Time started: \_\_\_\_\_ Time finished: \_\_\_\_\_

**Instructions:** Given necessary templates, tools and materials you are required to perform the following tasks within **8-12** hours.

**Task 1:** asses risk occurrence beekeeping farm.(5point)

**Instructions: write the appropriate answer for the following questions**

1. List risks that come from carelessness.(5point)
2. Write equipments used for PPE.(5point)